



General Site and Location Information

The proposed landfill site consists of approximately 2,652 acres of land owned by the City of Phoenix (City). The land is currently used for agricultural purposes. Attached is a map of the site and surrounding area.

Benefits to the Town of Buckeye

- *The Town of Buckeye is expected to experience substantial future growth. Phoenix and Buckeye are working together to ensure economical disposal services for Buckeye residents for the next 100 years.*
- *Buckeye will receive \$250,000 to \$350,000 in payments each year, based on an intergovernmental agreement between the City of Phoenix and the Town of Buckeye (includes 7.5 percent commercial royalty).*
- *The City of Phoenix will work with Buckeye to expedite improvements of State Route (SR) 85 through the state transportation planning process.*
- *The City of Phoenix will provide 2,800 cubic yards of roll-off space annually for Buckeye community cleanups.*

Public Involvement

During the siting process, the City engaged the public in a number of ways to provide information on this potential landfill site and obtain public input. Several outreach methods were used to engage the public and encourage feedback as follows:

- *Newsletters were developed outlining the three potential landfill locations, and to announce community open houses and encourage written comments on an enclosed form.*
- *A community open house was held on November 15, 2001 at the Buckeye Community Center to provide information on the potential landfill site and obtain public input. A future open house will be held to document public input and submit it to the Arizona Department of Environmental Quality (ADEQ) as part of the*

City's permit application to operate a landfill at the site. The City will invite property owners within 3 miles of the proposed landfill site's outer boundary to this open house.

- *An advertisement was placed in the Arizona Republic on October 31 and November 6, 2001 to announce the three potential sites and the community open house. Announcement of the open house was also placed in the Buckeye Valley News and West Valley View community papers.*
- *Flyers were posted in community places such as the Buckeye Community Center.*
- *A project web site (www.phxlandfill.com) announced the proposed sites and community open houses, and continues to provide updated information on the project. The site also contains a link to the project email address (garbage@phoenix.gov) directing input and questions to the project team.*
- *A telephone information line was updated to provide information on the community open houses and to invite verbal comments from the public.*
- *The City and the Town of Buckeye worked together to develop and implement a Citizen's Participation Plan as required by the Town's Development Code. The plan included mailed notification of the hearing to land owners within 300 feet of the property. Additionally, the City responded to correspondence and provided information through a fact sheet, telephone information line, and the web site. The City prepared the required Citizen's Participation Plan Report that documented the outreach and public input.*

Property Values

In "An Evaluation of the Impact of a Well-Designed Landfill on a Surrounding Property Values" published in *The Appraisal Journal* (April 1991), the authors report that "there is no significant difference in either current prices or in appreciation rates over a ten-year period" of residential housing adjacent to a Los Angeles-area landfill. In the mid-1980s a case study conducted on four existing landfills throughout the United States concluded that, compared to overall trends in residential property values in the control areas, three of the four study areas showed no change in property values and the fourth area showed increased property values. Recent studies in Arizona reflect these findings.

Environmental Issues

Historically, landfills have been a cause for citizen concern based on problems associated with their location, design and operations. This led to a number of associated environmental, health, and safety issues that plagued the landfill industry and have contributed to its present day stigma. To address these issues, in 1991, the U.S. Environmental Protection Agency (EPA) issued regulations (which ADEQ adopted) requiring landfills to meet engineering and performance requirements with respect to their locations, design, and on-site operational practices.

The SR 85 site has been carefully evaluated in accordance with Federal and State criteria that govern the siting, design, construction, and operation of municipal landfill facilities. This site meets or exceeds all applicable criteria. The City has conducted several studies (cultural, biological, geotechnical, and environmental) on the proposed site; reports have been prepared that summarize the findings of these studies and are available for viewing at the City. Results are as follows:

- *The City conducted a groundwater assessment and corresponding groundwater mapping during Spring 2002 to establish both groundwater elevations and directional flow for groundwater in the area. Although local groundwater elevations can fluctuate with seasonal pumping related to agricultural activities and with rainfall, the overall depth to groundwater ranges from 195 to more than 300 feet deep. The proposed landfill depth has not been decided, but is expected to be in the range of 70 to 120 feet deep, which provides a minimum 75-foot buffer zone between the landfill liner system and local groundwater elevation at its nearest point, accounting for*

fluctuations. The buffer zone increases to more than 200 feet in other areas within the site.

- *The landfill will be designed and constructed with an ADEQ-approved liner system that provides isolation from groundwater. The regulations require landfill owners to either monitor groundwater to verify that there is no impact from the landfill or demonstrate that there is "no potential for migration " based on EPA guidelines. The groundwater in the general area and at the site flows towards the east-southeast.*
- *As part of landfill operations, the City constructs berms to control drainage, litter, and noise. Trucks serving the landfill will be covered to keep trash from spilling out in transport, and crews will pick up trash that may have escaped from the trucks and landfill.*
- *Other practices for litter control include daily inspections, perimeter berms and fencing, and the application of daily cover. Practices for dust control include spraying water, paving access roads, and stabilizing non-paved roads with dust-control materials such as gravel or asphalt millings.*
- *Landfill air emissions are regulated by Maricopa County, who will issue air permits for the landfill. A dust control plan is also required to comply with PM 10 (dust) regulations. The permits will impose emission limits and control measures to maintain compliance with the applicable air emissions regulations.*
- *Regulations require the City to use several methods to preclude the presence of vectors (rodents, insects, etc.). Timely placement and compaction of daily, intermediate, and final cover on the refuse fill will control odors and deprive vectors of a food source and thus discourage their proliferation. Minimizing the size of the area where trash is being buried will also serve to control vectors. Inspections will occur on a regular basis.*

Visual Impacts

As part of landfill operations, the City will construct berms and other design features to control drainage, litter, noise, and visual impacts. The City will develop and submit to ADEQ a landscape plan that will discuss the proposed vegetation to be used for cover, perimeter

screening, and other purposes throughout the life of the landfill.

Additionally, the final cap of the landfill will be shaped in a manner to minimize visual impacts with the surrounding landscape. Native plants and grasses will be planted to blend with the surrounding area.

Truck Traffic

Based on the City's plans for operations at the landfill, approximately 100 to 150 trailer-truck loads will be disposed at the landfill each day. The City has been working with the Arizona Department of Transportation (ADOT) to address issues related to SR 85. ADOT's plans to enhance the safety of the road include the following:

- *Widening to create a four-lane divided highway along its entire length from Gila Bend to the Interstate 10 interchange.*
- *A traffic interchange that will provide safer access to the prison and Patterson Road using acceleration/deceleration ramps, bridges, and two-way frontage roads.*

According to ADOT's schedule, construction of these improvements is scheduled to begin in December 2002. The City plans to begin operations at the landfill site in 2005.

The traffic volumes as provided by ADOT indicate a vehicle trip count in the vicinity of the proposed project ranging from 9,700 trips per day (tpd) currently, to a projected count of 12,900 tpd in 2022. The traffic related to the landfill represents approximately 3.1 percent of the estimated traffic today.

Floodplains

State regulations prohibit landfill construction within 1/2 mile from floodplain flows exceeding 25,000 cubic feet per second (cfs). The 100-year floodplain of the Gila River has flows that exceed 25,000 cfs; however, the proposed landfill site is located more than 1/2 mile from the edge of the 100-year floodplain of the Gila River. The proposed landfill site is south of the 100-year floodplain of Rainbow Wash that flows near Patterson Road. However, the site is not located in or abut the 100-year floodplain of Rainbow Wash. The actual channel for Rainbow Wash is 1/2 mile from the landfill property at its nearest point. Because the flows in Rainbow Wash do not exceed 25,000 cfs as determined by the Federal Emergency Management Agency (FEMA), who reports

the flow as 11,600 cfs, it is not necessary for the landfill to be 1/2 mile from the Rainbow Wash floodplain.

No landfill cells will be developed within 100-year floodplains. Approximately 42 acres of the 2,652 acres owned by the City of Phoenix are located within the current 100-year floodplain along the upstream (east) side of the Gila Bend Canal. However, either the landfill cells will be developed outside the floodplain, or drainage improvements for the landfill will eliminate the floodplain at the upstream (east) side of the canal within the operational footprint of the landfill.

Drainage improvements will control waters flowing to and from the landfill site in accordance with Flood Control District of Maricopa County requirements.

Current Landfill Capacity

The City of Phoenix has reviewed regional waste generation data, population data, and current regional landfill capacities to determine the estimated life of the regional municipal solid waste landfills. Based on estimates of population growth, waste generation rates, and recycling efficiency, the regional landfills (both public and private) are estimated to reach capacity in approximately 2030. The City is pursuing this landfill to ensure its residents and residents of Buckeye have economical trash services for at least the next 50 years. Marketing of third-party waste must be approved by the Town of Buckeye.

Next Steps

The City is working with the Town of Buckeye Development Board and Town Council to amend the General Plan, rezone the property, and obtain a Conditional Use Permit for the landfill. The City also will be working with the Flood Control District of Maricopa County, Environmental Health Services Departments, and ADEQ in the coming months as it pursues permitting for the site.

Contact Us

The City and its consultant, URS, are willing to meet with you to further discuss your concerns related to the landfill. Please contact Mr. Ron Serio, PE, the City's Project Manager, or Mr. Pascal Hinnen, PE, URS Project Manager to arrange a meeting at your convenience. Mr. Serio can be reached at (602) 534-1420, and Mr. Hinnen at (602) 648-2455. You can also visit us on the web at www.phxlandfill.com or e-mail us at garbage@phoenix.gov. Thank you again for your interest and input into this project.